

Figure 1

Prototype Gene Targeting Strategy

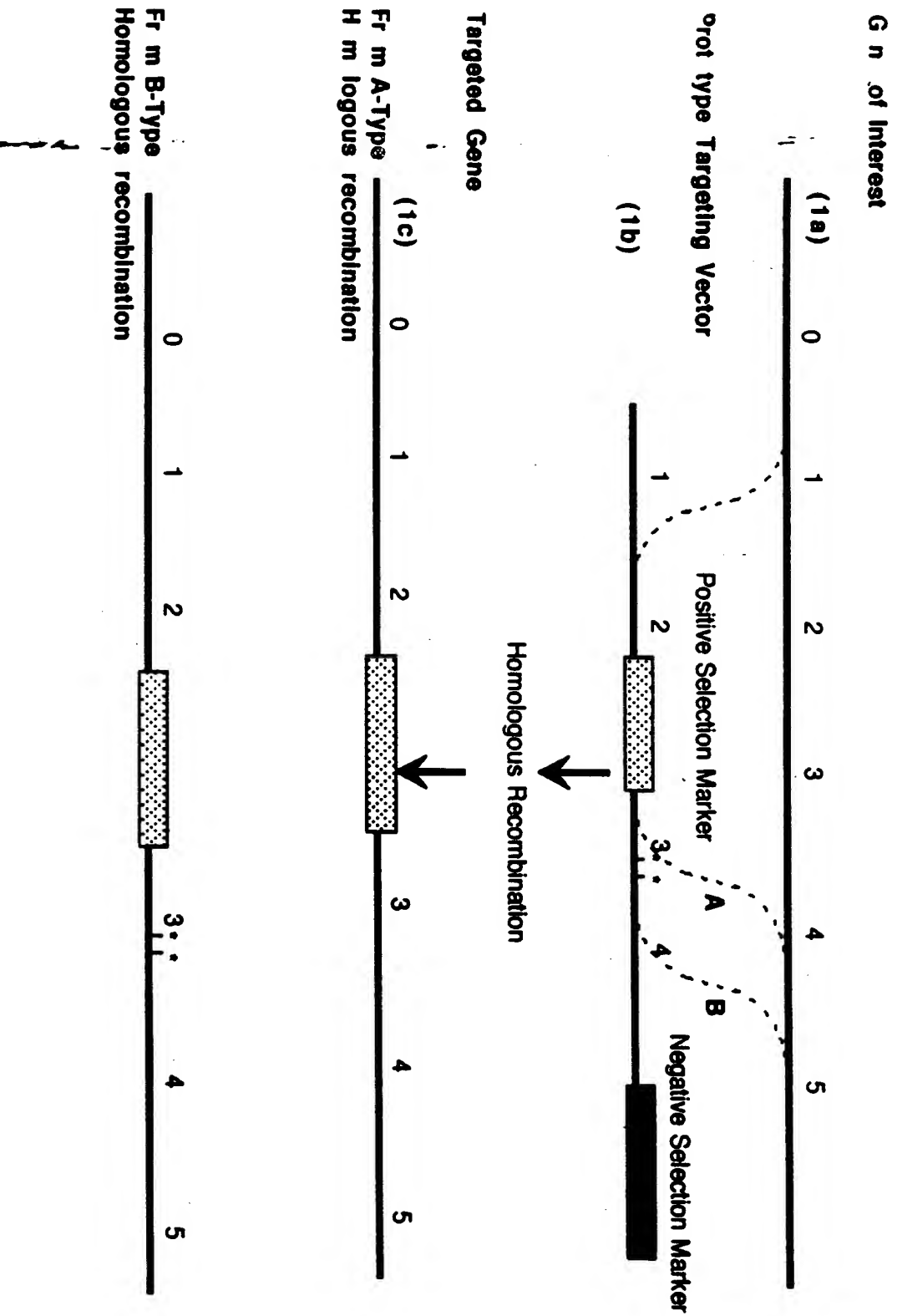
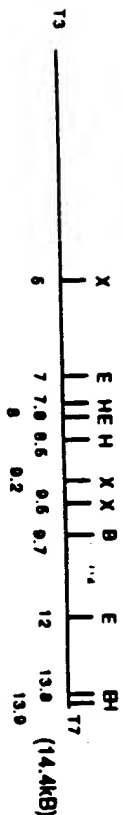


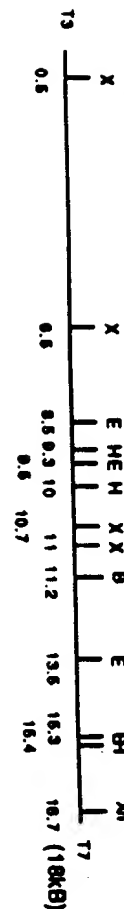
Figure 2

M use PS-1 Ex n 8 Regl n Gen' mlc Cl ne Maps

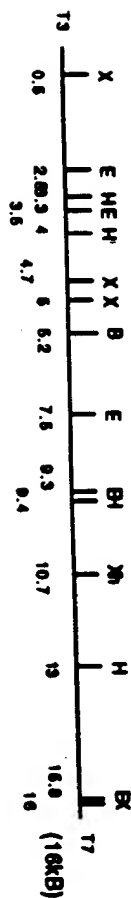
2a) λ PS1-4



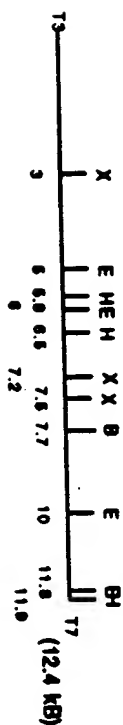
λ PS1-6



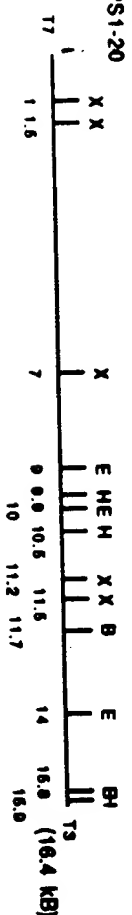
λ PS1-10



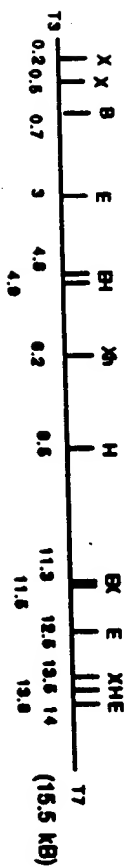
λ PS1-17



λ PS1-20

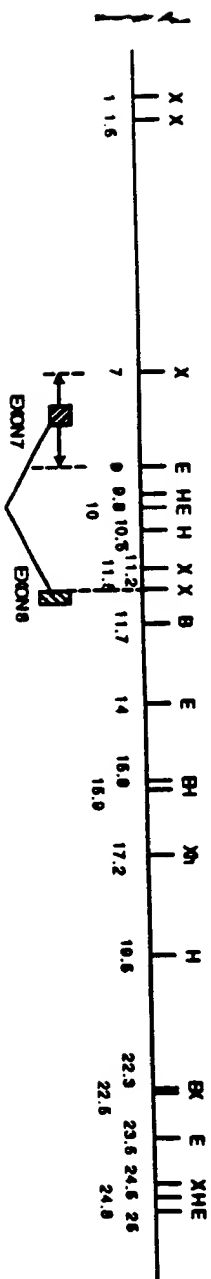


λ PS1-22



2b)

SUMMARY MAP (26.5 kb)



Restriction Mapping With FLASHTM Gene Mapping Kit **Figure 3**

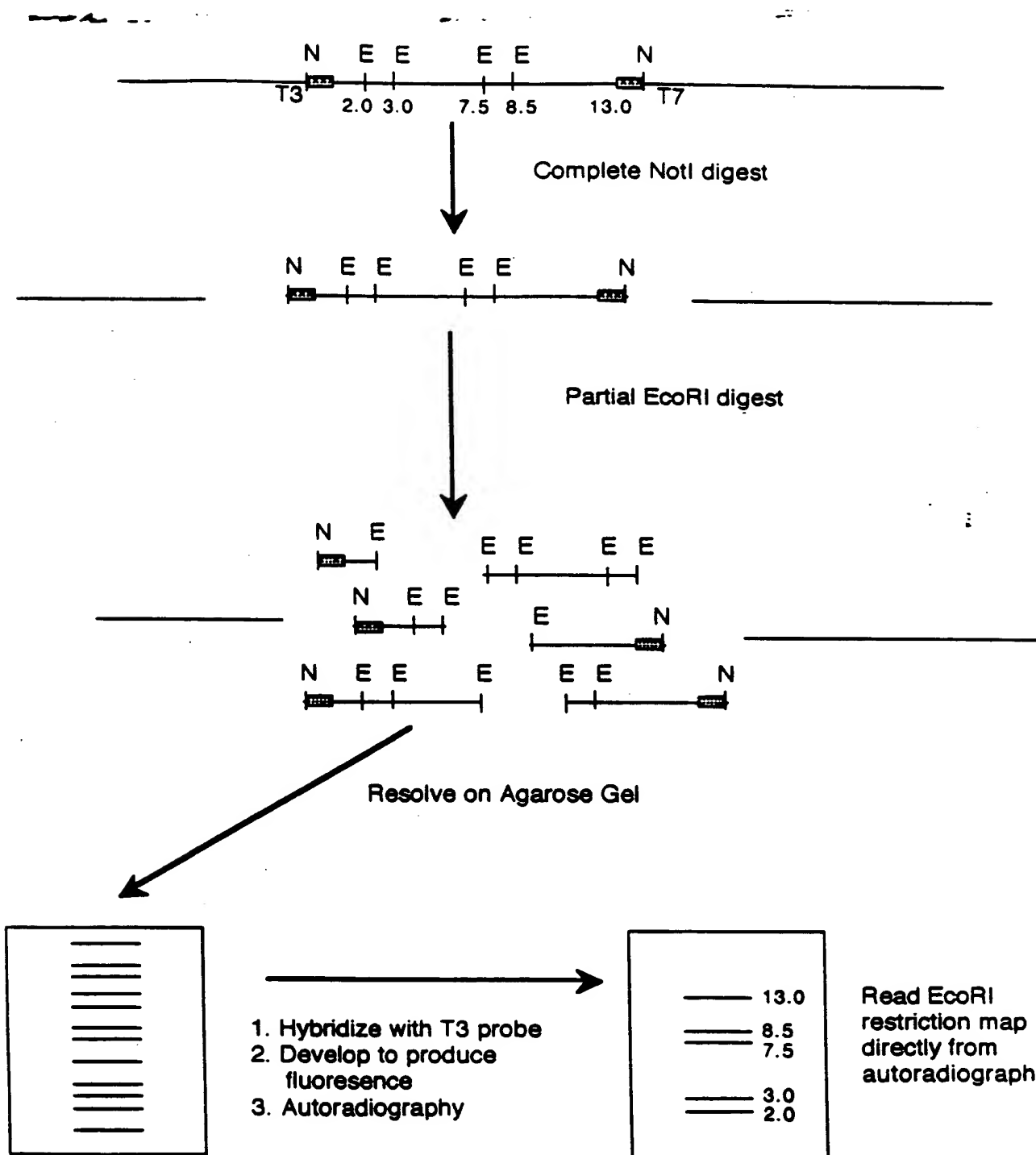
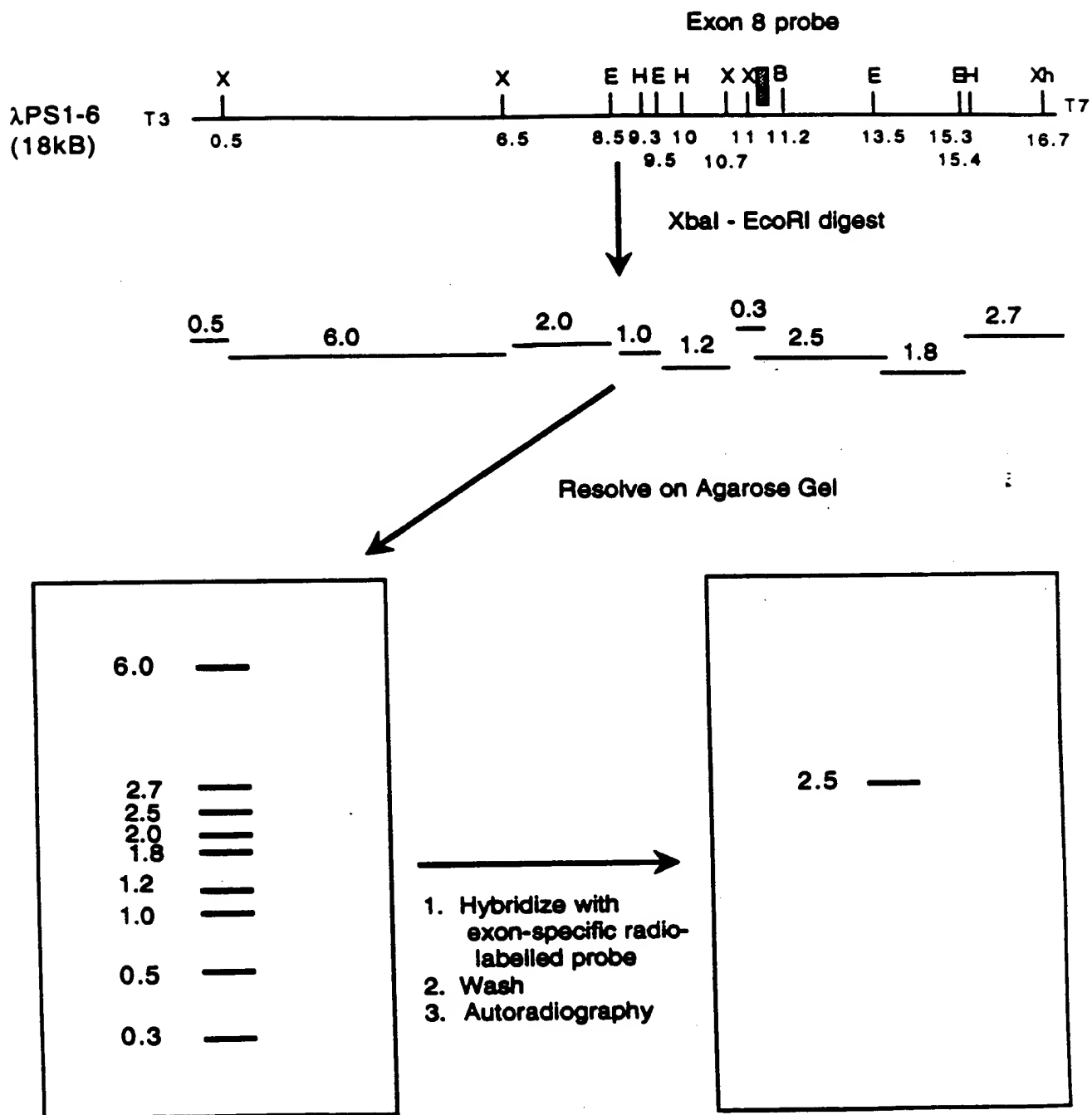


Figure 4

Strategy Used to Place Exons 7 and 8 on PS1 Restriction Map



pPNTlox² Synthesis

Figure 6

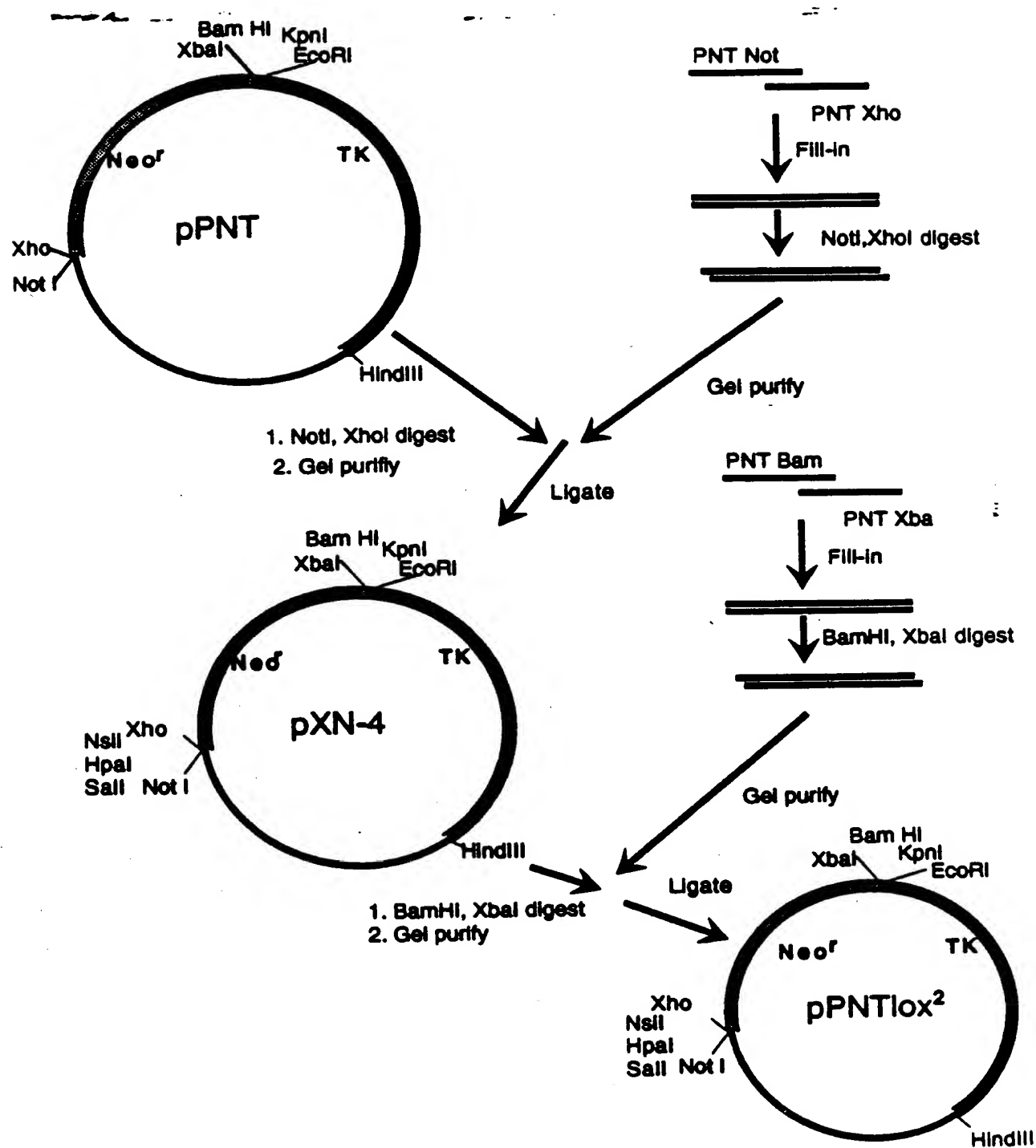
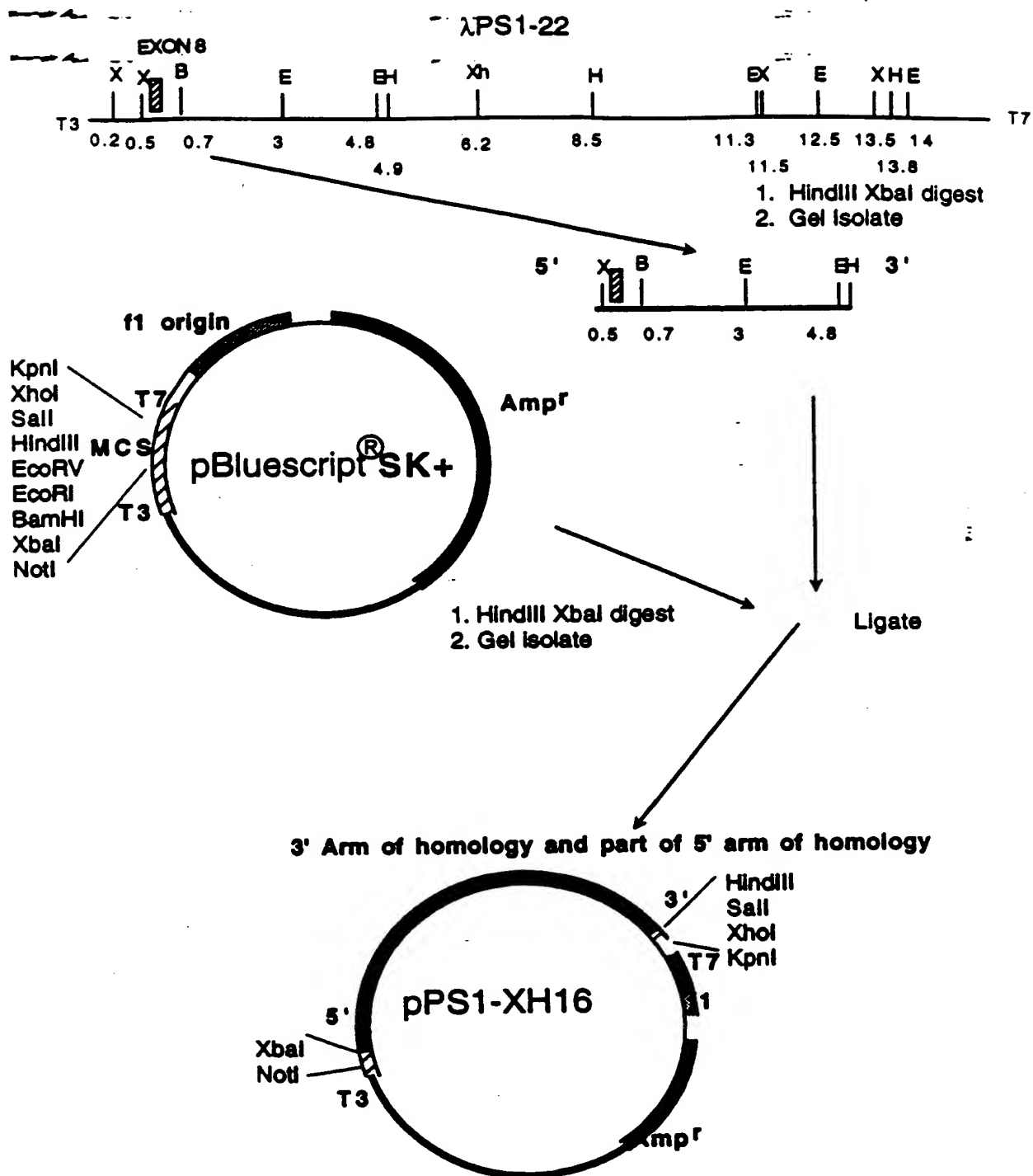


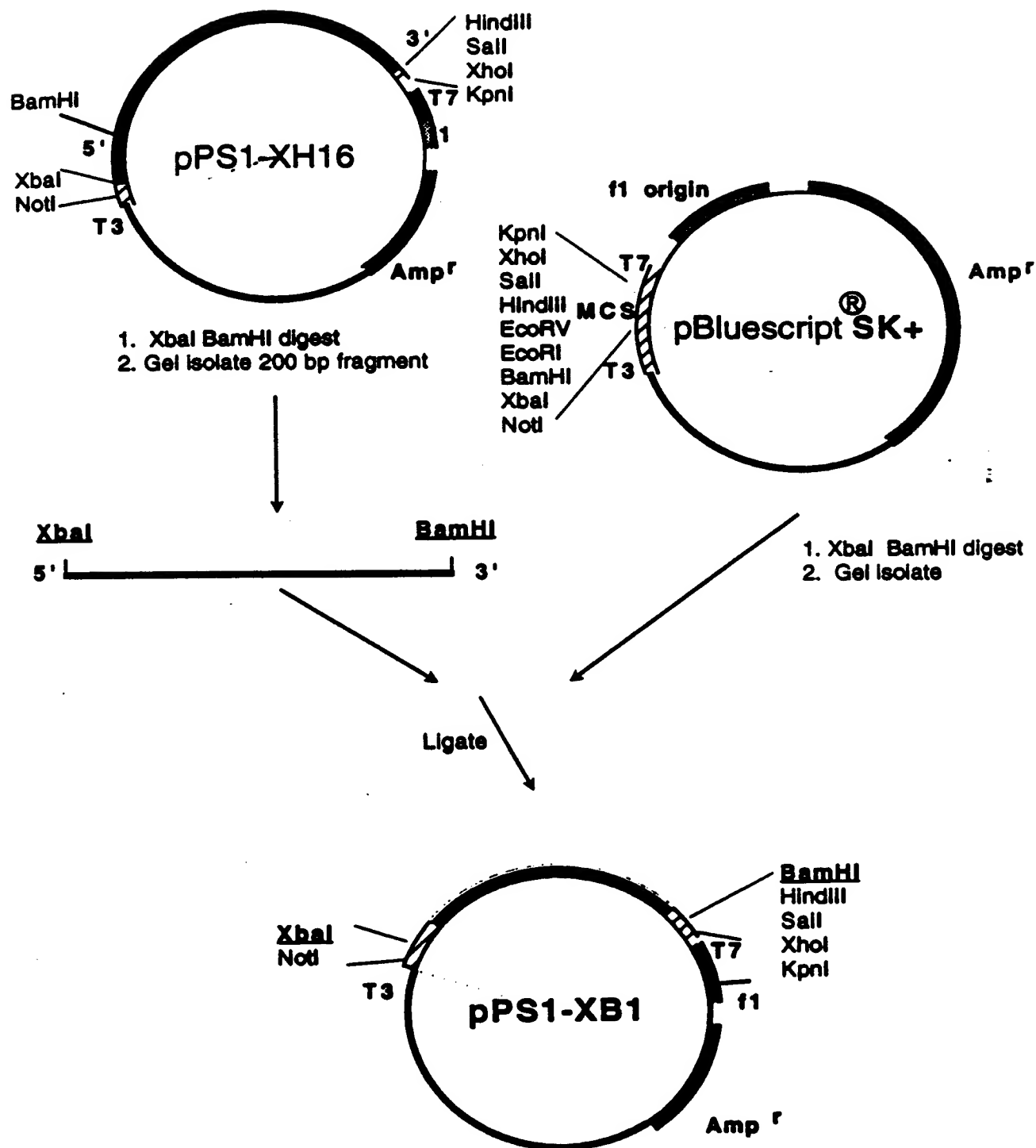
Figure 7

pPS1-XH16 Construction



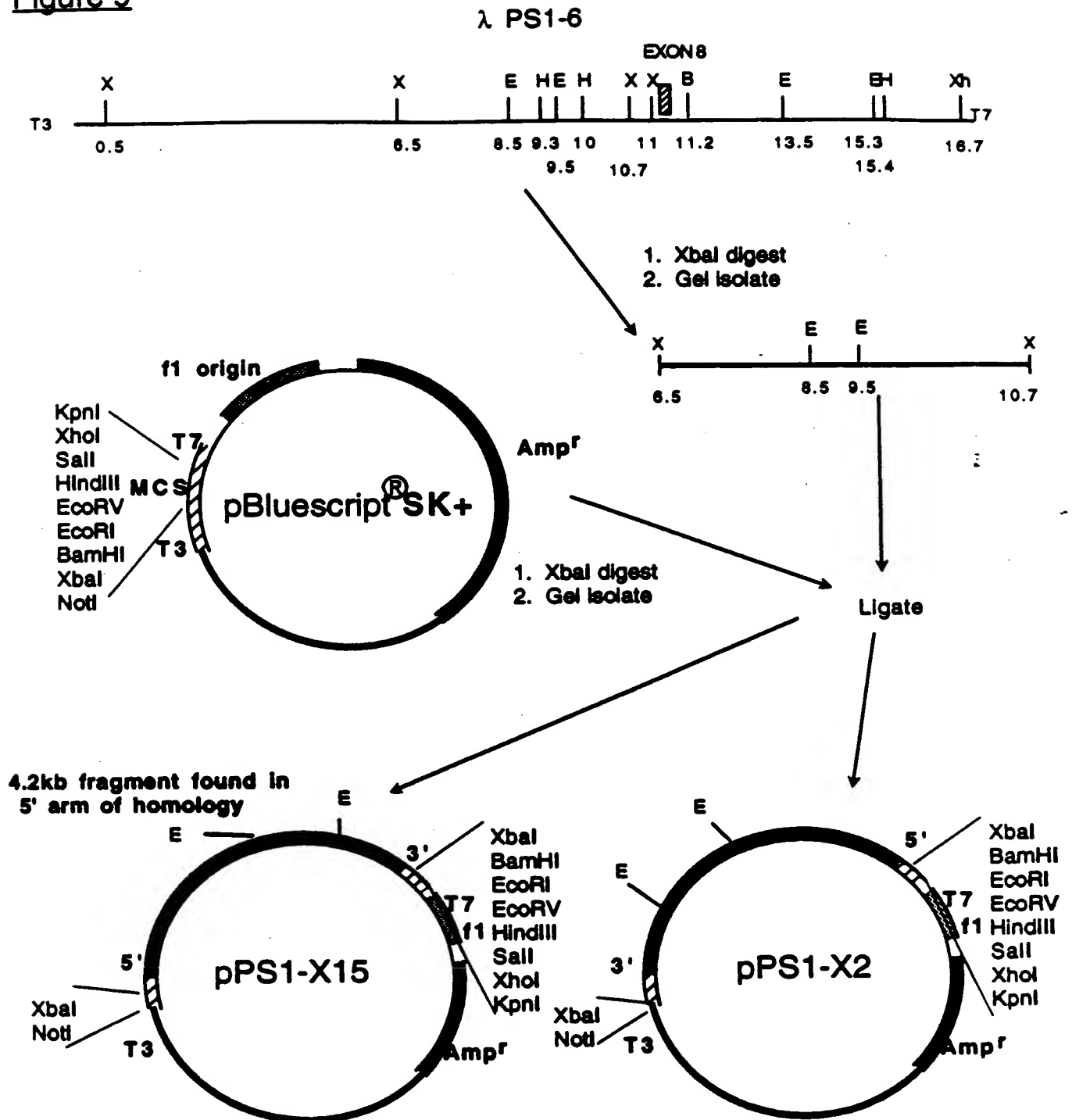
pPS1-XB1 Construction

Figure 8



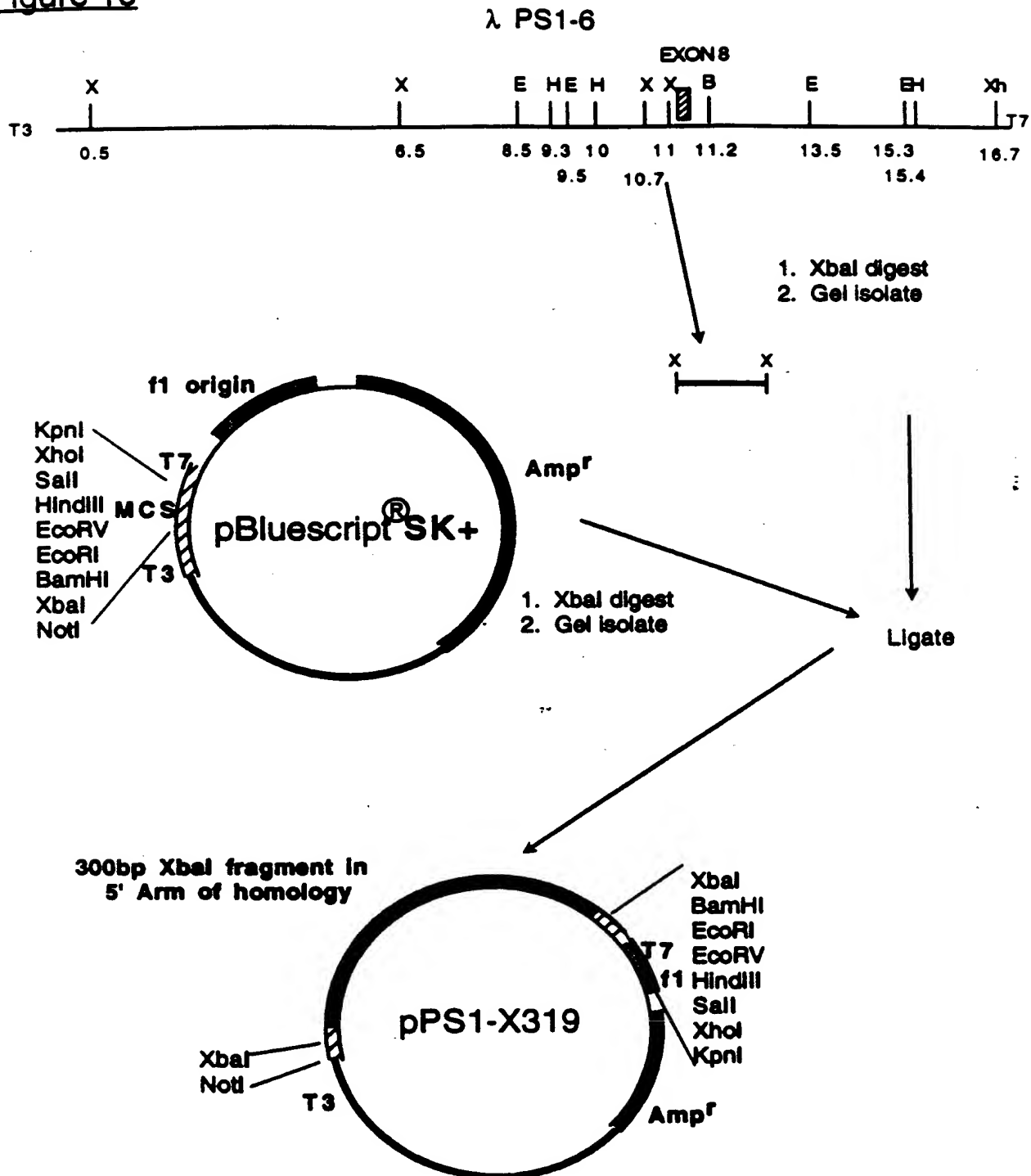
pPS1-X15, -X2 Construction

Figure 9



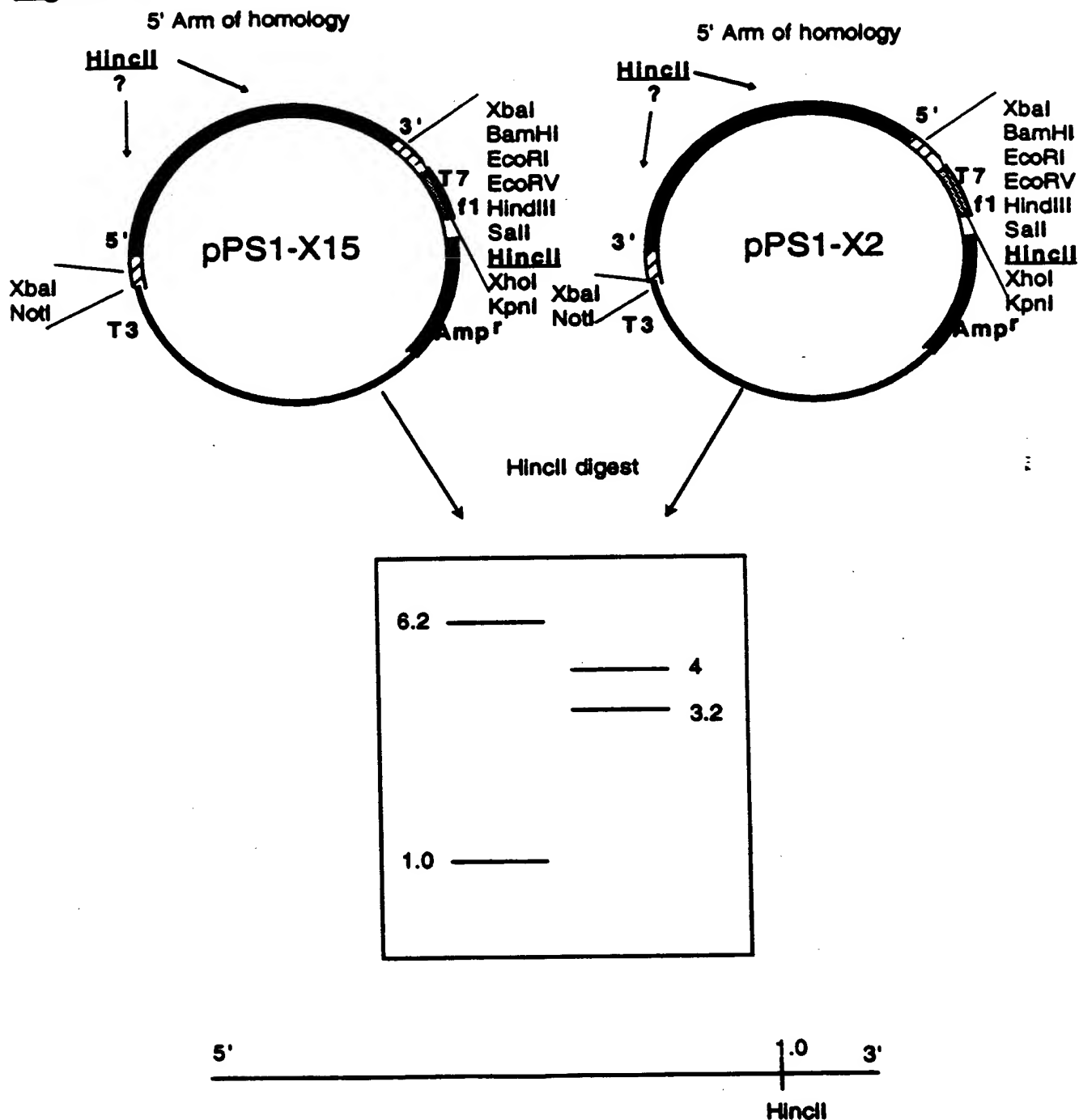
pPS1-X319 Construction

Figure 10



Example of R striction Mapping th 5' Arm of Homology

Figure 11



Detailed Restriction Map Summary For PS1 3' and 5' Arms of Homology

Figure 12

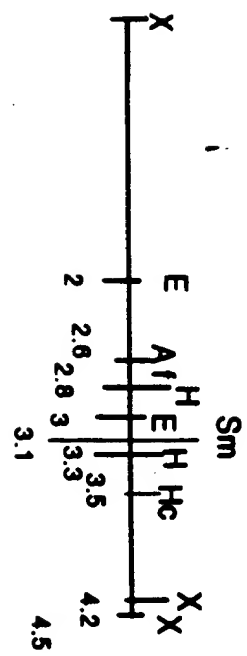
5' Arm

5' Arm: Enzymes that don't cut

Sall HpaI ApaI SpeI KpnI
SphI StuI NsiI PvuI

Enzymes that cut but are not mapped

PstI BglII DraI NcoI PvuII



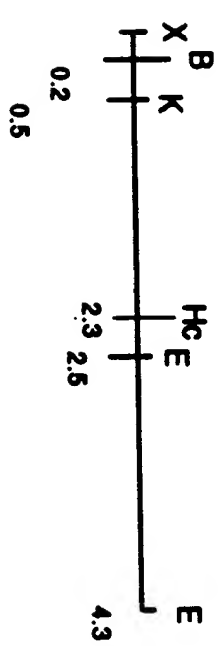
3' Arm

3' Arm: Enzymes that don't cut

Sall SpeI SmaI ApaI
PvuII PvuI AccI

Enzymes that cut but are not mapped

StuI BglII PstI NcoI DraI SphI

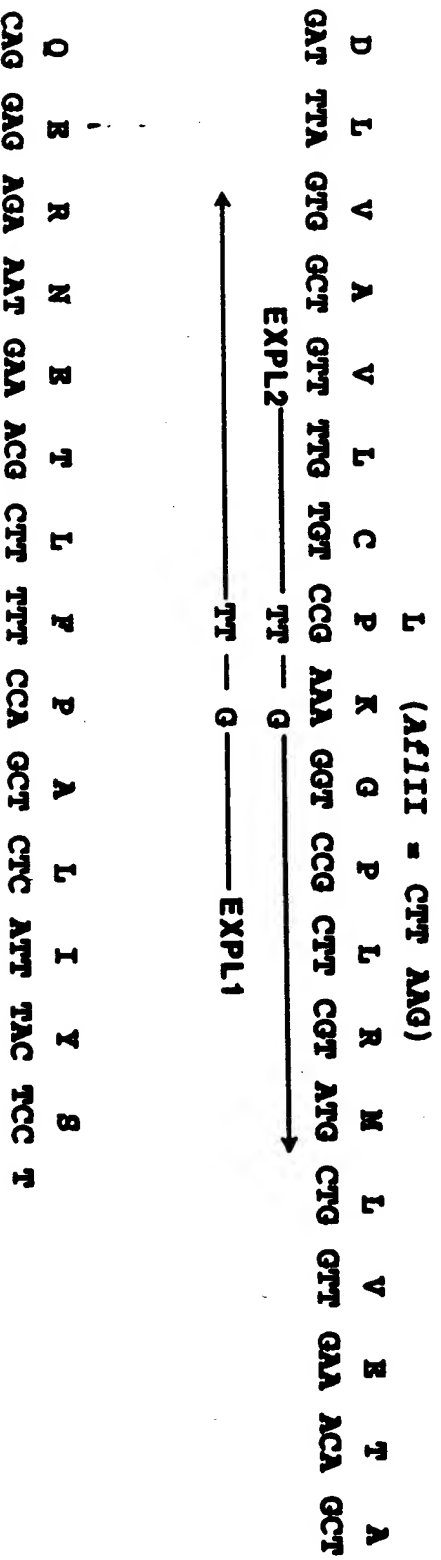


Legend

- E - EcoRI
- H - HindIII
- X - XbaI
- Hc - HincII
- K - KpnI
- A - AclI
- B - BamHI
- Sm - SmaI

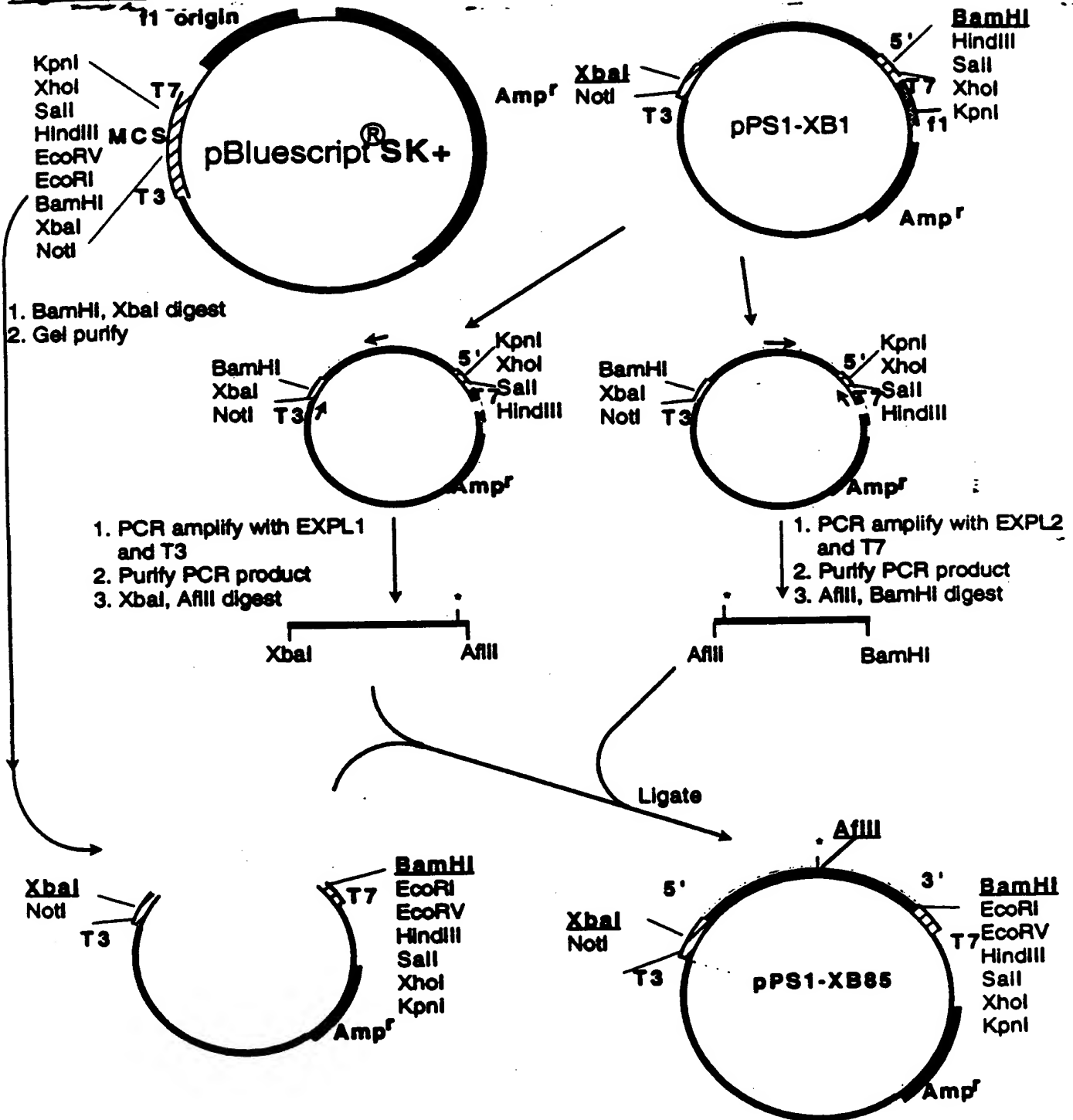
PS-1 Exon 8 Mutagenesis

Figure 13



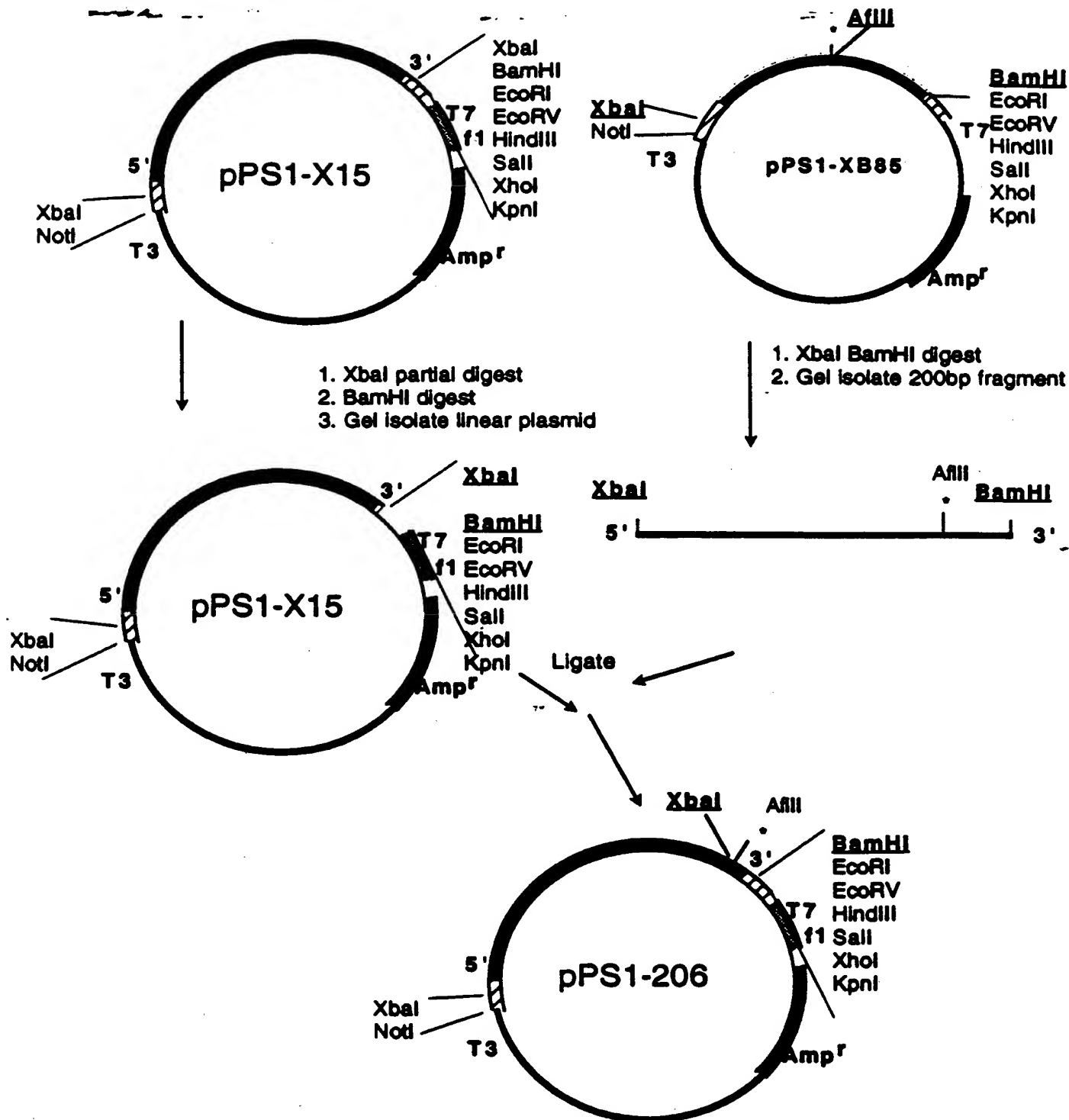
pPS1-XB85 Construction

Figure 14



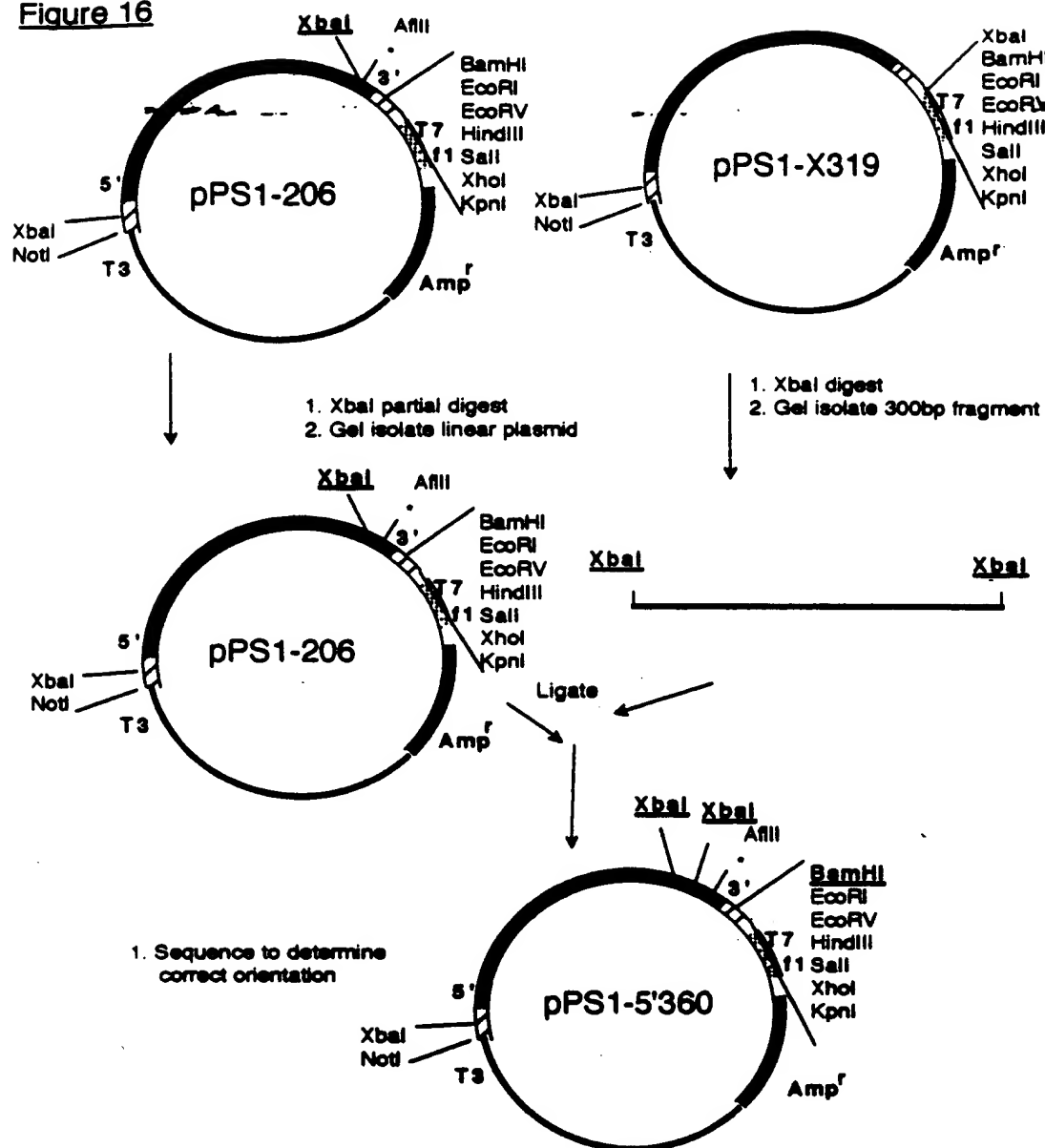
pPS1-206 Construction

Figure 15



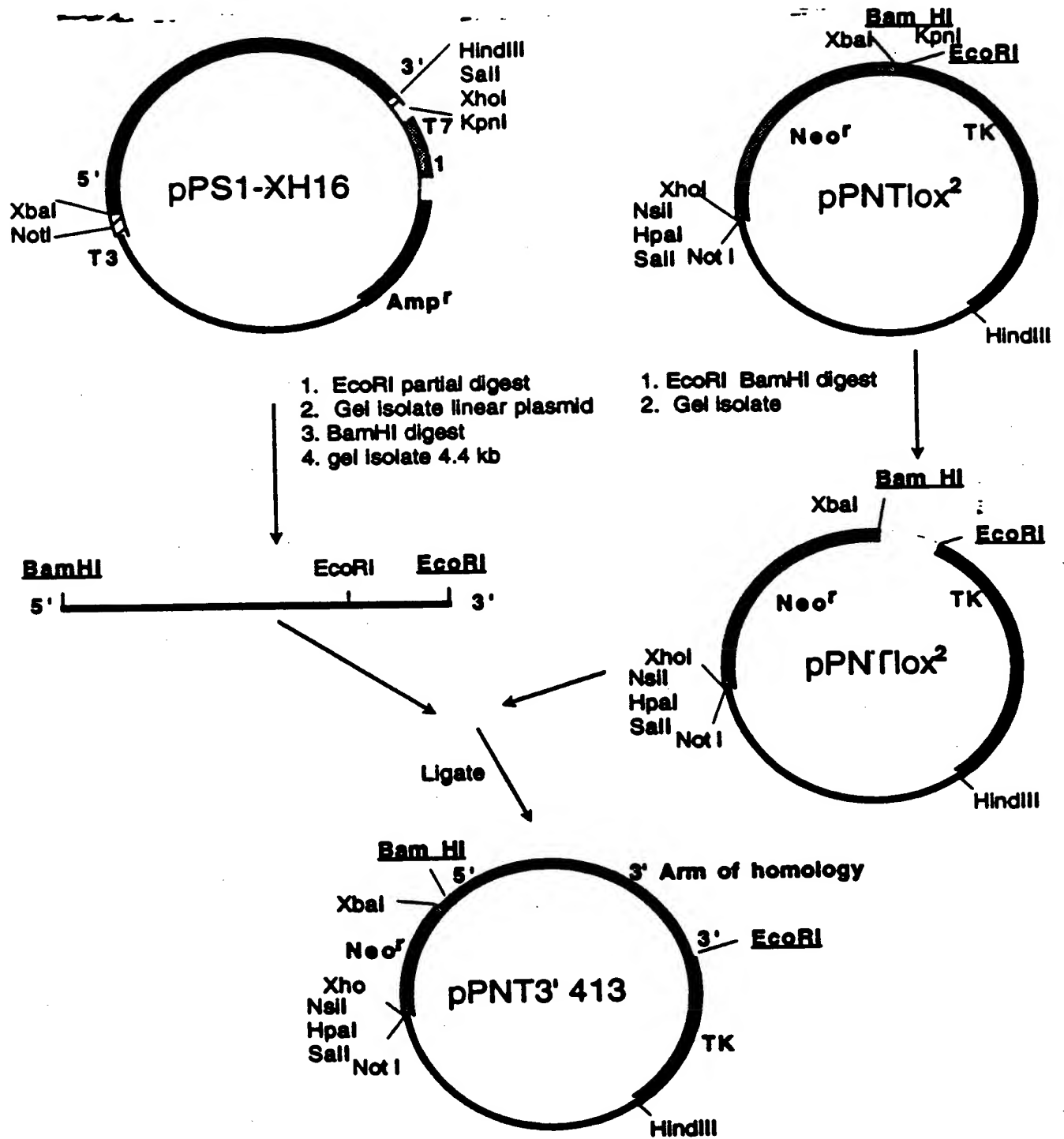
pPS1-5360 Construction

Figure 16



pPNT3'413 C nstructi n

Figure 17



pPS1-8-TV Construction

Figure 18

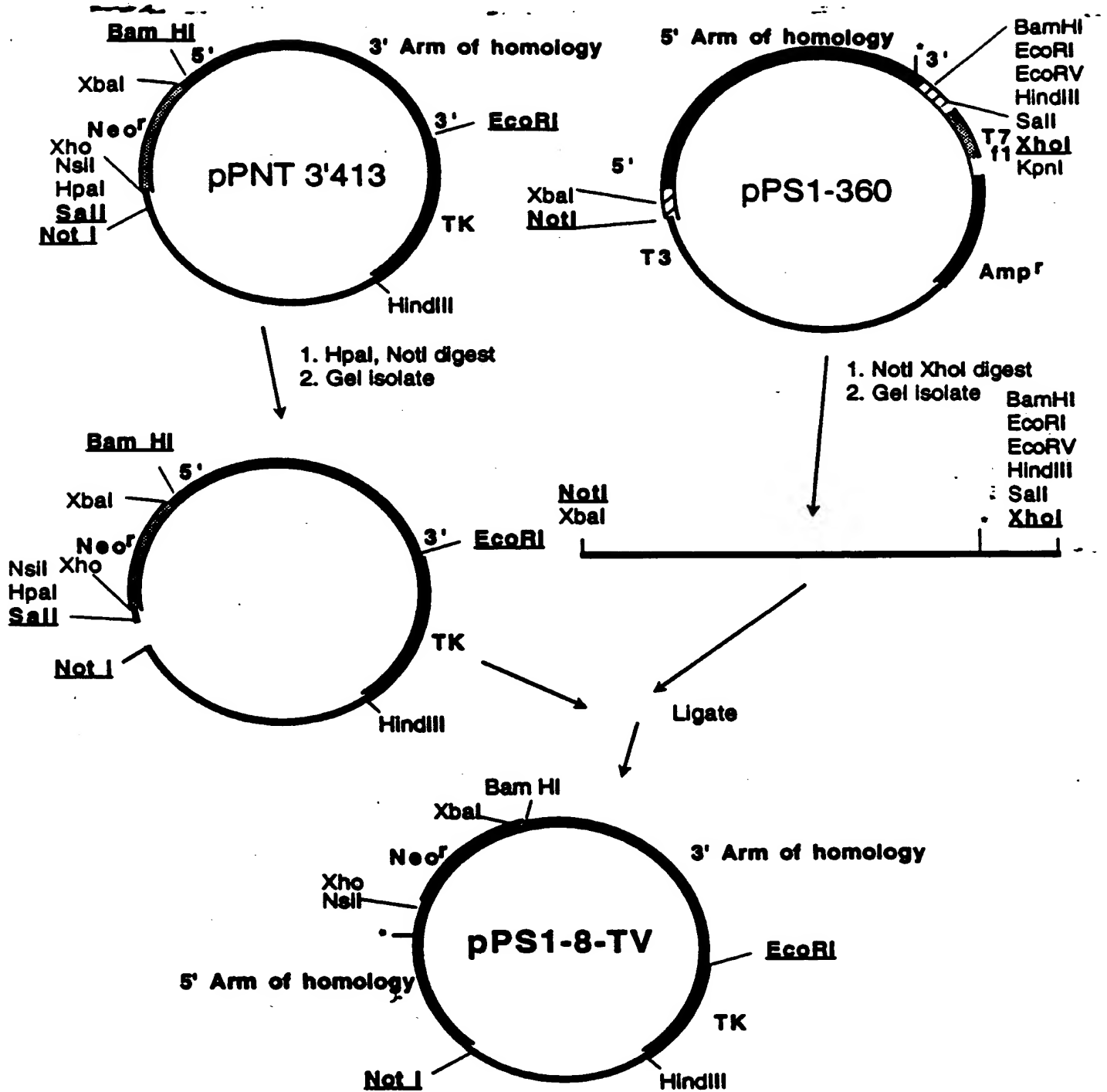


Figure 19

Strategy to detect homologous recombination within mouse PS1

